

<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	09/932,490	TEMOSHENKO ET AL.	
	Examiner	Art Unit	
	Hong Cho	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments filed on 11/21/2005.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Fish on 12/19/2005.

Claim 16 has been amended as shown in the attachment A.

The examiner's amendment was made to add allowable subject matter to the claim 16.

### ***Conclusion***


2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - US Pub (20020009973) to Bondy et al.
  - US Pub (20030012196) to Ramakrishnan
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087.

The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*hc*  
Hong Cho  
Patent Examiner  
12/20/2005

  
HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

1. (Previously Presented) A method for intercepting packets in a pipeline network processor, comprising:
  - receiving an information packet from an inbound port;
  - determining an outbound port for the information packet;
  - determining whether the outbound port has been identified for intercept processing;
  - determining whether the destination has been identified for intercept processing in response to the outbound port being identified for intercept processing;
  - making a copy of the information packet in response to the destination being identified for intercept processing.
2. (Original) The method of Claim 1, further comprising:
  - placing an identity of a destination into the information packet for subsequent determination of intercept processing.
3. (Original) The method of Claim 1 further comprising:
  - forwarding the copy of the information packet to an intercept receiver.
4. (Original) The method of Claim 1, further comprising:
  - forwarding the information packet to the destination through the destination port.
5. (Original) The method of Claim 1, further comprising:
  - forwarding the copy of the information packet to a routing processor for destination routing.
6. (Original) The method of Claim 1, further comprising:
  - comparing the destination to a list of reference destinations desired for interception.

7. (Original) The method of Claim 6, wherein the destination is individually compared to each reference destination with a match is found.

8. (Original) The method of Claim 7, further comprising:  
forwarding the information packet to the destination without copying in response to the destination not matching any of the reference destinations.

9. (Original) The method of Claim 1, further comprising:  
determining whether the inbound port has been identified for intercept processing;  
determining whether a source of the information packet has been identified for intercept processing in response to the inbound port being identified for intercept processing;  
making a copy of the information packet in response to the source being identified for intercept processing.

10. (Original) The method of Claim 8, further comprising:  
comparing the source to a list of reference sources in order to determine whether the source has been identified for intercept processing.

11. (Original) A pipeline network processor implementing code for intercepting packets, the code comprising:

a first set of instructions operable to receive and classify an information packet, the first set of instructions operable to determine whether an inbound port from which the information packet is received has been identified for intercept processing;

a second set of instructions operable to determine an outbound port for routing of the information packet, the second set of instructions operable to determine whether the outbound port has been identified for intercept processing;

a third set of instructions operable to determine whether the packet satisfies input access requirements, the third set of instructions operable to forward the information packet along an intercept path in response to the inbound port being identified for intercept processing, the third set of instructions operable to determine whether a source of the information packet has been identified for intercept processing upon feedback of the information packet on the intercept path, the third set of instructions operable to determine whether the information packet satisfies output access requirements, the third set of instructions operable to forward the information along the intercept path in response to the outbound port being identified for intercept processing, the third set of instructions operable to determine whether a destination of the information packet has been identified for intercept processing upon feedback of the information packet on the intercept path;

a fourth set of instructions operable to set up feedback of the information packet on the intercept path, the fourth set of instructions operable to save appropriate bytes of the information packet to permit feedback processing of the information packet on the intercept path;

a fifth set of instructions operable to place an address of the source of the information packet into a compare area of the information packet, the fifth set of instructions operable to determine an address for the destination of the information packet, the fifth set of instructions operable to place the address of the destination into a compare area of the information packet;

a sixth set of instructions operable to feedback the information to the first set of instructions on the intercept path.

12. (Original) The pipeline network processor of Claim 11, wherein the third set of instructions is operable to construct a copy of the information packet upon feedback of the information packet on the intercept path in response to either the address of the source or the address of the destination being identified for intercept processing.

13. (Original) The pipeline network processor of Claim 11, wherein the address of the source and the address of the destination are compared to a configured list of intercept addresses in order to determine whether the information packet is to be intercepted.

14. (Original) The pipeline network processor of Claim 11, wherein the sixth set of instructions is operable to forward the information packet to the destination upon completion of intercept processing.

15. (Original) The pipeline network processor of Claim 11, wherein the fifth set of instructions determines the address of the destination from a re-encapsulated Layer 2 header associated with the information packet.

16. (Currently Amended) A system for intercepting packets, comprising:

a packet interface operable to receive an information packet from a source at an inbound port;

a pipeline network processor operable to forward the information packet to a destination through an outbound port, the pipeline network processor including a plurality of processing columns operable to determine a destination for the information packet, the plurality of processing columns operable to determine whether the source, the inbound port, the outbound port, and the destination are identified for intercept processing, the plurality of processing columns operable to build a copy of the packet in response to ~~either~~ of the source, the inbound port, the outbound port, or the destination for the information packet being identified for intercept processing;

a route processor operable to configure the pipeline network processor for intercept processing.

17. (Original) The system of Claim 16, wherein the plurality of processing columns are configured to compare an address for the source and the destination to a configured list of intercept addresses.



18. (Original) The system of Claim 16, wherein the pipeline network processor is operable to route the copy of the information packet to the route processor for forwarding to an intercept receiver in response to either the source or destination being identified for intercept processing.

19. (Original) The system of Claim 16, wherein the pipeline processor is operable to forward the copy of the information packet to an intercept receiver in response to the source or destination being identified for intercept processing.

20. (Original) The system of Claim 16, wherein the pipeline network processor forwards the information packet to the destination.

21. (Previously Presented) A system for intercepting packets in a pipeline network processor, comprising:

means for receiving an information packet from an inbound port;

means for determining an outbound port for the information packet;

means for determining whether the outbound port has been identified for intercept processing;

means for determining whether the destination has been identified for intercept processing in response to the outbound port being identified for intercept processing;

means for making a copy of the information packet in response to the destination being identified for intercept processing.